

EXAMINER'S AMENDMENT

1. Claims 1-13 are pending in the instant application.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark W. Sincell on October 1, 2008.

The application has been amended as follows wherein the following versions of claims 1-3, and 5-13 replace all prior versions in their entirety and claim 4 is

CANCELLED:

1. A method of transmitting signals from at least two first antennae to at least one second antenna comprising the steps of:
determining at least one first coefficient based upon information indicative of at least two first signals received by the at least two first antennae, said at least one first coefficient being indicative of at least one correlation between the first signals, said at least two first signals being transmitted from said at least one second antenna; and
determining at least one second coefficient based on the first coefficient, said at least one second coefficient indicating weights applied to at least two second signals to be transmitted, respectively, by said at least two first antennae, the weights indicating relative amounts of orthogonal coding and beamforming to be used for transmitting said at least two second signals.
2. The method of claim 1, wherein the step of determining said at least one ~~correlation~~ first coefficient ~~between the received signals~~ comprises determining at least one amplitude correlation coefficient based on at least one pilot signal transmitted by said at least one second antenna.

3. The method of claim 1, wherein the step of determining said at least one first coefficient comprises determining at least one phase correlation coefficient based on at least one pilot signal transmitted by said at least one second antenna.

4. (CANCELLED) ~~The method of claim 3, wherein the at least one phase correlation coefficient is estimated.~~

5. The method of claim 1, wherein the step of determining said at least one first coefficient comprises determining at least one correlation between the received first signals based on at least one pilot signal transmitted by said at least one second antenna.

6. The method of claim 1, wherein the step of determining said at least one second coefficient based on the first coefficient comprises selecting a proportion of orthogonal coding relative to a proportion of beamforming used for transmitting ~~the signals~~.

7. The method of claim 6 ~~1~~, wherein the said at least one first coefficient varies between a first level and a second level.

8. The method of claim 13, wherein the value of said at least one first coefficient having a level between the first and second levels results in selecting both beamforming and orthogonal coding for transmitting.

9. The method of claim 13, wherein the value of said at least one first coefficient determines the proportion of beamforming relative to orthogonal coding used for transmitting.

10. The method of claim 9 ~~13~~, wherein the value of said at least one first coefficient being at a level that is closer to the first level results in ~~transmitting~~ more beamforming than orthogonal coding used for transmitting.

11. The method of claim 9 ~~13~~, wherein the value of said at least one first coefficient being at a level that is closer to the second level results in ~~transmitting using~~ more orthogonal coding than beamforming used for transmitting.

12. The method of claim 9 ~~13~~, wherein the value of said at least one first coefficient relative to the first and second reference levels determines the relative amounts of beamforming relative to orthogonal coding used for transmitting.

13. The method of claim 7, wherein ~~a value of the said~~ at least one first coefficient being ~~substantially~~ equal to the first level results in selecting beamforming for transmitting and wherein the value of said at least one correlation coefficient being ~~substantially~~ equal to the second level results in selecting orthogonal coding for transmitting.

Claims 5, 6, and 7, are renumbered respectively as claims 4-6, claim 13 is renumbered as claim 7, and the dependency of claim 13 is renumbered to depend upon claim 6.

Allowable Subject Matter

3. Claims 1-3, and 5-13 renumbered as claims 1-12 are allowed.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON M. PERILLA whose telephone number is (571)272-3055. The examiner can normally be reached on M-F 8-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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